CLAIMS

What is claimed is:

1. Apparatus for intelligently redirecting data traffic from a Public Switched Telephone Network (PSTN) to a data network, the apparatus comprising:

an intelligent communications platform connected between a switch and a Signaling System 7 (SS7) network to intercept SS7 messages between the switch and the SS7 network; and

a communications control module connected to the intelligent communications platform via a Transmission Control Protocol/Internet Protocol (TCP/IP) link, the communications control module for providing management and communications to the ICP and providing access to the management and communication for a plurality of subscribers.

2. The apparatus of claim 1 wherein the ICP includes:

an SS7 I/O card for processing SS7 messages; and

a CPU card for processing ISUP and TCAP.

3. The apparatus of claim 1 wherein the communications control module includes:

instructions for receiving messages from other ICPs for updated information on congestion on certain routes.

4. The apparatus of claim 1 wherein the communications control module includes:

instructions for receiving messages from other ICPs for updated information on congestion on certain routes.

5. The apparatus of claim 1 wherein the communications control module includes:

instructions for the plurality of subscribers to enter respective access line availability, alternative access numbers; and

instructions for a plurality of users to populate respective user profiles.

6. The apparatus of claim 1 wherein the GUI allows internet service providers (ISP) to update information on status of a plurality of modem banks within the ISP.

7. The apparatus of claim 1 wherein the GUI allows a network engineer to view traffic congestion and redirect traffic if necessary.

8. A system for intelligently redirecting data traffic from a Public Switched Telephone Network (PSTN) to a data network, the system comprising:

instructions for an intelligent communications platform connected between a switch and a Signaling System 7 (SS7) network to intercept SS7 messages between the switch and the SS7 network; and

instructions for a communications control module connected to the intelligent communications platform via a Transmission Control Protocol/Internet Protocol (TCP/IP) link to provide management and communications to the ICP and to provide access to the management and communication for a plurality of subscribers.

9. The system of claim 8 further including:

instructions for an SS7 I/O card to process SS7 messages; and

instructions for a CPU card to process ISUP and TCAP.

10. The system of claim 8 further including instructions for receiving messages from other ICPs for updated information on congestion on certain routes.

11. The system of claim 8 further including instructions for receiving messages from other ICPs for updated information on congestion on certain routes.

12. The system of claim 8 further including:

instructions for the plurality of subscribers to enter respective access line availability, alternative access numbers; and

instructions for a plurality of users to populate respective user profiles.

13. The system of claim 8 further including instructions for the GUI to allow internet service providers (ISP) to update information on status of a plurality of modem banks within the ISP.

14. The system of claim 8 further including instructions for the GUI to allow a network engineer to view traffic congestion and redirect traffic if necessary.

15. A method for intelligently redirecting data traffic from a Public Switched Telephone Network (PSTN) to a data network, the method comprising:

intercepting Signaling System 7 (SS7) messages by an intelligent communications platform connected between a switch and a Signaling System 7 (SS7) network, wherein the SS7 messages are from the switch and to the SS7 network;

providing management and communications control from a communications control module connected to the intelligent communications platform via a Transmission Control Protocol/Internet Protocol (TCP/IP) link; and

providing access to the communications control module to a plurality of subscribers.

16. The method of claim 15 further including:

processing SS7 messages with an SS7 I/O card; and

processing ISUP and TCAP messages with a CPU card.

17. The method of claim 15 further including receiving messages from other ICPs for updated information on congestion on certain routes.

18. The method of claim 15 further including receiving messages from other ICPs for updated information on congestion on certain routes.

19. The method of claim 15 further including:

providing the ability for the plurality of subscribers to enter respective access line availability, alternative access numbers; and

providing the ability for a plurality of users to populate respective user profiles.

20. The method of claim 15 further including providing the ability for the GUI to allow internet service providers (ISP) to update information on status of a plurality of modem banks within the ISP.

21. The method of claim 8 further including providing the ability for the GUI to allow a network engineer to view traffic congestion and redirect traffic if necessary.